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| APPLICATION NO. | FILING DATE | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO.     | CONFIRMATION NO. |
|-----------------|-------------|----------------------|-------------------------|------------------|
| 10/799,987      | 03/12/2004  | David J. Glova       | 210633US00 (4081-06100) | 8787             |

37814 7590 10/16/2008  
CHEVRON PHILLIPS CHEMICAL COMPANY  
5601 Granite Parkway, Suite 750  
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| EXAMINER |
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JOHNSON, EDWARD M

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| ART UNIT | PAPER NUMBER |
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1793

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| MAIL DATE | DELIVERY MODE |
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10/16/2008

PAPER

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

|                              |                                      |                                     |  |
|------------------------------|--------------------------------------|-------------------------------------|--|
| <b>Office Action Summary</b> | <b>Application No.</b><br>10/799,987 | <b>Applicant(s)</b><br>GLOVA ET AL. |  |
|                              | <b>Examiner</b><br>Edward M. Johnson | <b>Art Unit</b><br>1793             |  |

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☒ Responsive to communication(s) filed on 26 August 2008.
- 2a) ☒ This action is **FINAL**.                      2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 1-33 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-33 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All    b) ☐ Some \*    c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- |  |   |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892)                       | 4) <input type="checkbox"/> Interview Summary (PTO-413)           |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)   | Paper No(s)/Mail Date. _____                                      |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date _____  | 6) <input type="checkbox"/> Other: _____                          |

**DETAILED ACTION**

***Claim Rejections - 35 USC § 102***

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless -

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claims 1-5, 10-13, 17-19, 21-23, and 26-27 are rejected under 35 U.S.C. 102(b) as anticipated by or, in the alternative, under 35 U.S.C. 103(a) as obvious over Nguyen et al. US 5,895,636.

Regarding claims 1 and 26, Nguyen '636 discloses a method for catalytic suppression of organic compounds and halogens thereof, which are produced by industrial processes (paragraph bridging columns 9-10), which would include catalytic processes in industry, comprising conversion of benzene to less harmful compounds (Example 6) wherein the activity of the catalyst is substantially unaffected by successive regeneration treatments (column 11, lines 1-5). Nguyen '636 further discloses 150-450 degrees C (column 8, lines 60-65).

Regarding claims 2 and 31-32, Nguyen '636 discloses oxidation (abstract).

Regarding claim 3, Nguyen '636 discloses 150-450 degrees C (column 8, lines 60-65).

Regarding claims 4-5 and 29, Nguyen '636 discloses high benzene conversion and temperature control (Tables 1 and 3).

Regarding claims 10-13, 19, 21-22, 30, and 33, Nguyen '636 discloses the activity of the catalysts is substantially unaffected by successive regeneration treatments (column 11, lines 1-5).

Regarding claims 17-18, Nguyen '636 discloses platinum (column 3).

***Claim Rejections - 35 USC § 103***

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 6-9, 20, 23-25, and 27-28 are rejected under 35 U.S.C. 103(a) as being unpatentable over Nguyen '636.

Regarding claim 6-7, 20, 24-25, and 27-28 it would have been obvious to one of ordinary skill in the art at the time the invention was made to monitor and control, by stopping, dumping,

Art Unit: 1793

or screening, benzene because Nguyen '636 discloses high benzene conversion and temperature control (Tables 1 and 3), which would motivate the ordinary artisan to monitor the benzene and control the oxidation temperature in response thereto.

Regarding claims 14-16, apparatus limitations are not given undue weight in process claims. However, it would have been obvious to one of ordinary skill to use a fixed bed or plural reforming reactor system because Nguyen discloses a reactor bed, which would motivate an ordinarily skilled artisan to find an optimum bed type.

Regarding claims 8-9, Nguyen '636 discloses high benzene conversion and temperature control (Tables 1 and 3).

Regarding claim 23, Nguyen '636 discloses the activity of the catalysts is substantially unaffected by successive regeneration treatments (column 11, lines 1-5).

### ***Response to Arguments***

Applicant's arguments filed 8/26/08 have been fully considered but they are not persuasive.

It is argued that Nguyen does not anticipate claims 1-5, 8-13, 17-19, 21-23, and 26. This is not persuasive because Nguyen '636 discloses a method for catalytic suppression of organic compounds and halogens thereof, which are produced by industrial

Art Unit: 1793

processes (paragraph bridging columns 9-10), which would include catalytic processes in industry.

It is argued that Nguyen does not anticipated claims 24-25. This is not persuasive because claims 24-25 are rejected under §103 in view of Applicant's amendment.

It is argued that Nguyen does not anticipate claims 27-28. This is not persuasive for the reasons above.

### ***Conclusion***

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Edward M. Johnson whose telephone number is 571-272-1352. The examiner can normally be reached on M-F 9:30-6:00.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Stanley S. Silverman can be reached on 571-272-1358. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Art Unit: 1793

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Edward M. Johnson/  
Primary Examiner  
Art Unit 1793

EMJ